

ABSTRACT OF THE DISCLOSURE

A pair of edges that are located at ends as viewed
in the widthwise direction of a design pattern are
recognized. On the basis of the edge direction in
5 which the paired edges are recognized, edge points on
the design pattern are detected as sub-pixels. The
widthwise dimension of the design pattern is calculated
on the basis of the edge points. In addition, the
widthwise dimension of a circuit pattern is calculated
10 at the same position as the widthwise dimension of
the design pattern. On the basis of the calculated
widthwise dimensions, the semiconductor wafer circuit
pattern is checked.